

09/928,623

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REMARKS

Claims 1-26 are currently pending in the subject application and are presently under consideration. A version of all pending claims is found on pages 2-6. Claims 1, 11, 15 and 23 have been amended herein to correct minor informalities and for purposes of clarification. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claims 1-14 and 23-26 Under 35 U.S.C. §112

Claims 1-14 and 23-26 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is respectfully submitted that this rejection should be withdrawn for at least the following reason. Independent claims 1, 11 and 23 have been amended herein for purposes of clarification and such amendments are believed to overcome this rejection. Support for the herein amendment can be found throughout the specification, and in particular at page 5, line 9-10 and page 6, line 28-29. Accordingly, withdrawal of this rejection, together with withdrawal of the rejection of associated dependent claims 2-10, 12-14 and 22-26, is respectfully requested.

II. Rejection of Claims 1-26 Under 35 U.S.C. § 102(b)

Claims 1-26 stand rejected under 35 U.S.C. §102(b) as being anticipated by Azarya *et al.* (U.S. Patent No. 5,978,578). It is respectfully requested that this rejection should be withdrawn for at least the following reason. Azarya *et al.* does not describe each and every limitation set forth in the applicants' claimed invention.

A single prior art reference anticipates a patent claim only if it expressly or inherently describes each and every limitation set forth in the patent claim. *Trintec Industries, Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 63 USPQ2d 1597 (Fed. Cir. 2002); *See Verdegaa Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the ... claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

09/928,623

01SW100

Independent claim 1 (and similarly independent claims 11, 15 and 23) recites: a computer process interface library *comprising object-oriented based objects and classes* integrated into the automation interface component, the computer process interface library exposing the automation interface component to a client application process, *the client application process communicates with the at least one industrial controller programmatically*. Azarya *et al.* does not disclose, teach or suggest such elements.

The applicants' claimed invention relates to providing an automation interface to interact with industrial controllers, *e.g.*, programmed logic controllers (PLCs). In particular, the subject claimed invention comprises a computer process interface library which itself comprises *object-oriented based objects and classes*. The computer process interface library, incorporating the object-oriented classes and objects, is in turn integrated into an automation interface component. The automation interface component, through the computer interface library, is then capable of *programmatic communication* with at least one industrial controller, and can subsequently facilitate downloading, uploading and programming of control programs to the processors of the industrial controllers. It is readily apparent therefore that the subject claimed invention, through the use of object-oriented based classes and objects, obviates the necessity for compiling and loading a predetermined and pre-selected set of information regarding sensors and/or I/O devices at compile time. In the applicants' claimed invention, all that is required is that the general characteristics of generic sensors and/or I/O devices be known. It is this higher level of abstraction that allows the subject invention to dynamically adjust to changing circumstances without the need to successively recompile and reload executables for each and every automated interface component every time that circumstances change. Further it is apparent that the automation interface is a *programmatic communication component*, not solely a hardware component, for example, a node controller.

Azarya *et al.*, on the other hand, teaches a system, method and medium that comprises a control bus and a node controller, *e.g.*, OpenBus node controller. Further, Azarya *et al.*, teaches the use of pseudo-code or p-code. Unlike object-oriented classes and objects, pseudo-code or p-code is incapable of encapsulation, polymorphism and inheritance. Pseudo-code or p-code, in particular, is incapable of instantiation. Pseudo-

09/928,623

01SW100

code or p-code is only capable of handling predefined, pre-programmed and pre-selected events; events selected prior to compilation of the pseudo-code or p-code. Thus, it is apparent that pseudo-code or p-code cannot adapt to events beyond those that were pre-determined at compile time without the need to recompile the pseudo-code or p-code. Object-oriented classes and objects, on the other hand do not require pre-selection or pre-programming of events prior to compilation; neither do object-oriented classes and objects need to be re-compiled upon a change in circumstance, rather, when a new circumstance occurs all that is required is that a new instance of the object be invoked to handle the new circumstance. As a consequence, Azarya *et al.* requires that each and every OpenBus node controller be loaded with pseudo-code or p-code that contains information regarding a predetermined and pre-selected set of sensors and/or I/O devices. Thus, Azarya *et al.*, does not disclose, teach or suggest the use of *object-oriented based objects and classes*. Further, Azarya *et al.* does not facilitate communication with the industrial controller programmatically, but rather communication is facilitated solely through the use of attached hardware, *e.g.*, an intelligent I/O node controller or OpenBus node controller. (See, Azarya *et al.*, Abstract; Fig. 4; column 8, line 45-47; and column 9, line 32-34). Thus, Azarya *et al.* does not disclose, teach or suggest, communicating with an industrial controller *programmatically*, but rather communication is facilitated with industrial controllers entirely through an OpenBus node controller; a hardware means.

In view of the forgoing therefore, it is respectfully submitted that since Azarya *et al.* does not disclose, teach or suggest each and every element of the subject claimed invention, Azarya *et al.* could not have anticipated that which the applicants' have disclosed. As such the rejection with respect to independent claims 1, 11, 15 and 23, together with associated dependent claims should respectfully be withdrawn.

09/928,623

01SW100

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

AMIN & TUROCY, LLP



Himanshu S. Amin
Reg. No. 40,894

AMIN & TUROCY, LLP
24TH Floor, National City Center
1900 E. 9TH Street
Cleveland, Ohio 44114
Telephone (216) 696-8730
Facsimile (216) 696-8731